discovering MONTANA

Moving forward together.

State of Montana

Strategic Plan for Information Technology

2004 - 2005

A Letter From The Governor

To The Reader

We cannot underestimate the important role information technology plays in our daily lives. The delivery of services in business, education and government has been forever changed due to advances in technology and our willingness to embrace those advances. However, the value of technology can only be fully realized when it is implemented in a well-managed and effective way.

The appropriate technology implementation strategy for government requires that we focus on the services our customers need, and then deliver those services in the most effective and efficient manner. That is why I am pleased to present Montana's first Strategic Plan for Information Technology. The plan presents the vision, goals and strategies for the State of Montana to move forward together with information technology through the remainder of this decade.

The vision, goals, and strategies outlined in this plan are broad and far-reaching. The challenges are significant. As challenging as the road will be, the possibilities are vast. We have the opportunity, through implementing best practices, to enhance the way citizens of Montana interact with their state government. We also have the momentum to develop statewide systems that empower those who are doing business in Montana and for Montana. Moving forward together, Montana will continue the process of providing government services through the use of well planned and managed information technology. I am confident we will continue to develop a more effective government that serves our citizens and businesses and expands the possibilities for our great state.

I want to thank the many contributors who helped develop this very important document that lays the foundation for Montana's technology future. Because of their effort, the plan is complete, our vision is clear, and we can move forward together to realize our vision.

Sincerely,

Judy Martz

Forward

During the last quarter century, Montana state government agencies deployed information technology to pursue their missions to provide various services to the citizens of the state. For the most part, the efforts of these agencies were independent of each other, sometimes resulting in a duplication of systems and hardware. The needs of citizens were not always considered when government made investments in information technology.

The 2001 State Legislature recognized information technology as an enabler of government services and a critical component in state government's ability to provide appropriate services to its citizens. However, the legislature also recognized the complex and often overwhelming nature of controlling the growth and cost of state government's IT investments. This is due to the rapid pace of technology advancement, the complexity of implementing IT solutions, and the cost of acquiring and maintaining these systems.

In July 2001, the Montana Information Technology Act (Senate Bill 131) became effective. The Act created the position of Chief Information Officer for the state and established guiding principles for the implementation of information technology in state government. A critical component of the Act is the recognition by the Legislature and the Governor of the need for a single vision for information technology in state government. The Act provides for the development of a strategic plan for information technology in state government. Planning is an integral piece for establishing the foundation for well-managed deployment and use of information technology in state government. In September 2001, the Information Technology Board, created by the Act with broad representation (see page 27, for membership list), began the process of developing this information technology strategic plan. The *State of Montana Strategic Plan for Information Technology* provides the framework and guidance for state agencies to develop and use information technology resources to provide state government services.

The Montana Information Technology Act also requires that each state agency develop an information technology plan. Information from the individual agency plans, along with research and trend information, is used in the Strategic Plan for Information Technology. State agency plans and projects will be summarized in a companion document. The summaries provide specific agency technology goals and objectives information and outline the budget requirements for implementing the plans. The Act also requires the Department of Administration to review and approve the agency plans and provide oversight for the state's procurement of information technology.

The Strategic Plan for IT should be viewed in concert with the agency IT plans and the state's IT budget. These documents, when considered together, document the State of Montana's plans for information technology now and in the future. ■

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Executive Summary

Why Information Technology In Government?

In today's world, information technology is a critical enabling factor that drives industry, commerce, education and government. Advances in technology during the past few decades have dramatically changed the way individuals, businesses, and government organizations process, store, and transmit information. For example, in the past, birth, death, marriage, tax files, and land ownership records that a government office must maintain might require an entire floor of a large building, hundreds of file cabinets, thousands of file folders, and dozens of personnel to process, store, and manage. Today, all that information can reside in one plastic and metal box located under an employee's desk. The employee can now locate, duplicate, and transmit one page of that information in a matter of minutes to any location on the globe. ■

Public Expectations Have Evolved With Technology

Because these new capabilities exist our expectations have changed. Thanks to new technologies such as the Internet, we can buy kayaks from Missoula, check the weather in Helena, and make several stock market transactions in a few minutes at home before breakfast. Because the world of commerce offers such convenience and responsiveness, we have come to expect the same from government. Due to public demand, and because significant cost savings can be realized at the same time that services are dramatically improved, government has no choice but to implement appropriate information technologies. The downside of this reality is that difficulties and complexities always accompany the introduction, coordination, and management of technology. This is especially true in large organizations that struggle to meet the various needs of many interrelated entities. ■

The State of Montana Strategic Plan for Information Technology

Realizing these facts, the Montana State Legislature passed the Montana Information Technology Act in April 2001, setting in motion a number of parallel efforts designed to assess, direct, and manage the adoption of information technology in the State of Montana. This document, the *State of Montana Strategic Plan for Information Technology*, is an important step in the ongoing journey toward improving government through the use of information technology (IT). ■

Moving Forward Together

The overall theme of the Strategic Plan for IT is: ***Moving Forward Together***. This simple but powerful idea is expressed in every section of the document. Montana state government will act as an integrated enterprise with respect to information technology. In this Strategic Plan for

The *enterprise* is all agencies of the state working collaboratively to use, share, and leverage the investments made in information technology.

IT, the enterprise promises to efficiently use and wisely manage IT resources. Care will be taken to ensure the privacy of citizens and the security of information across the enterprise. By moving forward together, by collaborating with IT vendors, and by sharing information and resources between state agencies, the vision and goals expressed in the Strategic Plan for IT will become a reality for the citizens of Montana. ■

Overview of the State Strategic Plan for IT

This Strategic Plan for IT shows how we will move forward together toward better state government through the use of information technology. Strategic initiatives are described that offer the first opportunities to implement the Plan. Strategic goals and strategies that chart the course the enterprise must follow to accomplish the initiatives are identified. But in the beginning, the journey toward better state government starts with a vision. ■

State of Montana IT Vision

Montana state government will:

- ✓ Be customer-focused in providing electronic and traditional access to government services and information
- ✓ Meet customer expectations regarding their right to participate and their right to know, while protecting their right to individual privacy
- ✓ Promote and use information technology to enable its customers to prosper in the global economy
- ✓ Enter into strategic relationships and encourage collaboration at all levels of government to effectively use information technology
- ✓ Meet customers' expectations for the reliable and timely delivery of quality services and information
- ✓ Manage and use IT resources efficiently
- ✓ Establish statewide direction for information technology through fiscally responsible and active stewardship ■

The State's IT Strategic Direction

The IT Vision sets the strategic direction of information technology for state government. The IT Vision:

- Requires state government to be customer-focused when developing and deploying technology to provide services
- Expects state government to obtain input from the customers served by government
- Requires state government to pursue cooperation and sharing of information and technology resources to minimize unwarranted duplication in services and technology

Customers are the citizens, businesses, federal, local and tribal governments, other organizations and stakeholders that receive services from Montana state government.

- Focuses on the appropriate level of technology for state government and how to meet customer expectations for service delivery methods
- Recognizes the need for accountability to the Governor, the Legislature, and the citizens of Montana for state investments in information technology ■

Strategic Plan Framework

The IT Vision follows a framework that establishes the priorities and building blocks for moving forward together toward effective implementation of information technology in the future. The IT Vision focuses on building a strong foundation through active stewardship based on:

- A sound strategic planning process
- Carefully crafted policies and standards

Active stewardship means that IT policy makers will provide leadership and take ownership of and responsibility for achieving the IT Vision expressed in the Strategic Plan for IT.

- Fiscal responsibility
- Guidance from the governing boards and councils for information technology ■

Themes of the Strategic Plan for IT

Common themes have been woven into the fabric of the Strategic Plan for IT. They include ***customer-focus, economic empowerment, strategic relationships, reliability,*** and ***effective management***. These themes drive the direction of technology for the State of Montana into the future. ■

Goals and Strategies

The Strategic Plan for IT identifies nine goals and 36 strategies that support the themes expressed throughout the document and demonstrate how the state intends to achieve its IT Vision. The goals and strategies set the general direction for state government's use of IT resources. Their purpose is to:

- Guide and prioritize state and agency future IT investments
- Promote coordination of IT resources across multiple agencies
- Lay the foundation for agency IT planning
- Help agencies succeed in achieving their own missions while promoting efficient use of the state's IT resources
- Promote compatibility between agencies' IT plans and the Strategic Plan for IT ■

Goals of the Plan

The nine Strategic Plan for IT goals require the state to:

- Maximize the use of government IT resources through strategic relationships with business and other government entities to enhance the quality of life for Montanans
- Use appropriate and disciplined project management methodologies, and make strategic and fiscally responsible investments in IT resources
- Enhance the performance of agencies' mandates, missions, core competencies, and business processes through the appropriate and effective application of current and standardized IT resources
- Promote the sharing of IT resources, including data, information, business function expertise, and technology among agencies to minimize unwarranted duplication
- Aggressively deploy appropriate electronic government services for the benefit of its customers

Strategic Relationships are those entered into by two or more parties enabling the attainment of mutual goals that would be difficult or impossible to reach if attempted individually.

- Require its IT systems maintain confidentiality and integrity while providing enterprise IT resources consistent with customer needs
- Require reliable service delivery from its IT systems and maintain up-to-date plans and procedures for enterprise wide disaster recovery and business continuity
- Use secure, coordinated, standardized, and shared IT systems to deliver integrated services to its customers
- Develop a comprehensive mechanism for obtaining IT expertise both internal to state government and through external resources in order to support Montana's IT Vision in an environment of constant technological change ■

Strategies of the Plan

Several dozen strategies have been formulated to guide the implementation of the Strategic Plan for IT and its goals. Where the goals provide the broader path that information technology will take in Montana, the strategies give more detailed and focused direction to state personnel who will be responsible for realizing the IT Vision on the ground and through the wires of state government offices. ■

Examples of Strategies

The strategies are grouped under the goals that they most closely support. They describe what the state will actually do, such as:

- Develop an IT project management function within state government
- Identify the barriers to cooperation and IT use among state entities and develop plans to remove them
- Deliver services and information directly to the public via electronic and traditional means

- Pursue improvements through additional investment in existing technologies that support state agencies' missions and programs.

The strategies form the real heart of the Strategic Plan for IT. They tell what we must do to move forward together toward realization of the IT Vision. ■

Strategic Initiatives

If the strategies listed in the Strategic Plan for IT tell state organizations where to shoot, then the initiatives provide the targets. Strategic initiatives are IT-related goals or projects already embraced by the state and pursued to enable state government to achieve its IT Vision. Strategic initiatives provide the specific avenues for implementation of the IT goals. The initiatives identified in the Strategic Plan for IT include:

- Implementing Best Practices
- SummitNet
- Interactive Video
- Montana Educational Network Cooperative
- Public Safety Communications
- e-Government
- Montana Geographic Information Systems
- Criminal Justice Information Systems Project

Each strategic initiative completed moves us one step closer to achieving our IT Vision. ■

Success Factors

The Strategic Plan for IT contains goals, strategies, and strategic initiatives that the state must implement to demonstrate success. Several factors are critical to the successful implementation of the Strategic Plan for IT. These include:

- Commitment and support of the Legislature
- Commitment and leadership of the Governor and Information Technology Board
- Department and agency senior management commitment and leadership
- Cross departmental cooperation and coordination
- Department and agency participation through the IT governance groups
- Compliance/adherence to the statewide enterprise architecture and standards
- Managed expectations for IT initiatives
- Ongoing education/training of IT and departmental staff involved in the deployment and maintenance of IT assets ■

Next Steps

The Strategic Plan for IT does not exist in a vacuum. It must be integrated with a number of other efforts occurring every biennium. For example, state statute requires agencies to prepare their own IT plans that must be fully integrated with the state's Strategic Plan for IT. The next steps toward achieving the IT Vision are included in this document. ■

Conclusion

The use of information technology to improve state government is not an option; it's a necessity, and it's already happening. In order to properly manage the implementation of IT resources, careful planning is mandatory. The Information Technology Board created the *State of Montana Strategic Plan for Information Technology* to give purpose and direction to IT planning and implementation. By adopting and following this Strategic Plan for IT, state government will benefit from the vision and structure it provides and avoid costly mistakes due to lack of coordination and poor communication among state entities. In the following pages you will see the vision, goals, and strategies for state government in regard to information technology in the 21st century. The Strategic Plan for IT contains an IT Vision that focuses on the needs of state government's customers in determining IT directions. The goals and strategies will serve as the stepping-stones to that Vision.

The IT Vision moves us forward together toward more responsive, reliable, and convenient state government services for all Montanans. ■

State of Montana IT Vision

Montana state government will:

- Be customer-focused in providing electronic and traditionalaccess to government services and information
- Meet customer expectations regarding their right to participate and their right to know, while protecting their right to individual privacy
- Promote and use information technology to enable its customers to prosper in the global economy
- Enter into strategic relationships and encourage collaboration at all levels of government to effectively use information technology
- Meet customers' expectations for the reliable and timely delivery of quality services and information
- Manage and use IT resources efficiently
- Establish statewide direction for information technology through fiscally responsible and active stewardship ■

Overview

The Montana IT Vision sets the strategic direction of information technology for state government. The IT Vision:

- Requires state government to be customer-focused when developing and deploying technology to provide services
- Expects state government to obtain input from its customers
- Requires state government to pursue cooperation, collaboration, and sharing of information and technology resources to minimize unwarranted duplication in services and technology
- Focuses on the appropriate level of technology for state government and how to meet customer expectations for service
- Recognizes the need for accountability to the Governor, the Legislature, and the citizens of Montana for state IT investments ■

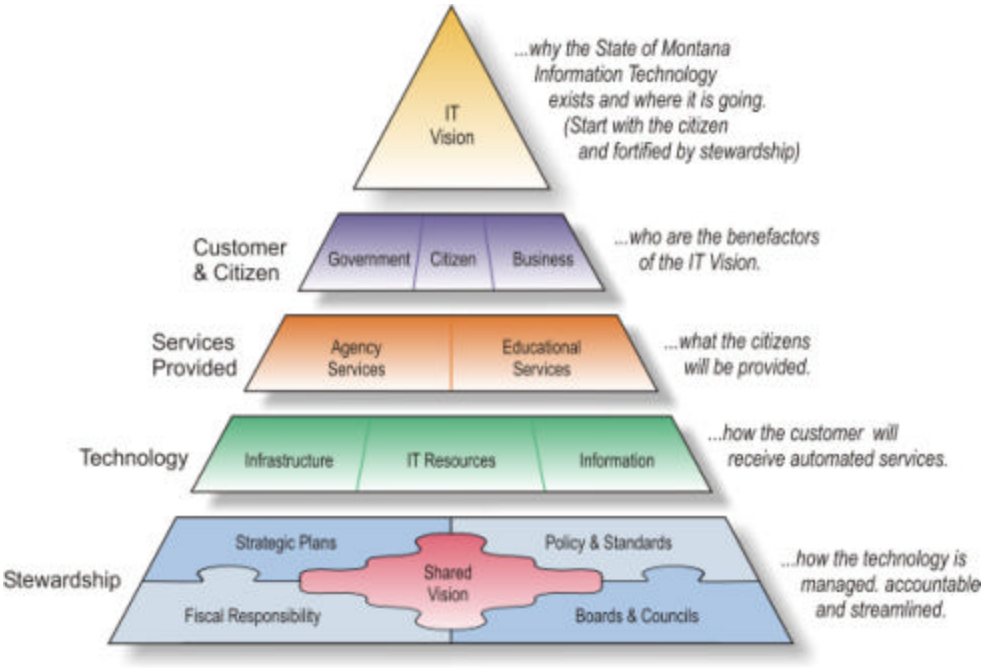
Information Technology Strategic Plan Framework

The Montana IT Vision follows a framework that establishes the priorities and building blocks for information technology in the future.

The IT Vision focuses on building a strong foundation through active stewardship based on:

- A sound strategic planning process
- Carefully crafted policies and standards and monitoring compliance
- Fiscal responsibility
- Guidance from the governing boards and councils for information technology.

Beyond active stewardship, the next building block focuses on the technology itself: the infrastructure, the IT resources, and the information maintained within the IT systems. Other building blocks in the framework focus directly on the services to be provided and most importantly, the customers – the citizens, businesses, and other governments that receive services from Montana state government. These building blocks provide the framework, set direction, and describe where the state wants its IT resources to be in the future. Throughout the Strategic Plan for IT and this IT Vision statement, the focus is on the customer, and on providing improved services to the citizens of Montana. ■



Strategic Plan Themes

Throughout the Strategic Plan for IT, common themes emerge and are identified: ***customer-focus***, ***economic empowerment***, ***strategic relationships***, ***reliability***, and ***effective management***. These themes drive the direction of technology for Montana in the future. The Strategic Plan for IT goals and strategies support these themes and demonstrate how the state intends to achieve its vision for information technology. ■

Customer-Focus

Montana state government will be customer-focused in providing electronic and traditional access to government services and information. State government will meet customer expectations regarding their right to participate and their right to know, while protecting their right to individual privacy.

Customer-focused or "customer-centric" is the new standard to apply when state government considers the availability and delivery of information and services via different methods, recognizing that government exists to serve the people. Technology clearly provides the opportunity to change our method of delivering the right services to the citizens and businesses of Montana in a customer friendly way. The customers of state services expect that:

- Citizens can provide information with confidence that their privacy will not be violated
- State government will employ best practices to ensure efficiency and effectiveness
- The products and services offered are what the people want.

The electronic delivery of information and services offers customers options in which method they want to use (online versus in line). The state will educate its citizens about the use and value of technology and, in turn, listen carefully to its citizens about how the technology should be applied to improve the quality of life in Montana.

State government will:

- Deliver information and services using an integrated, customer-focused, ADA compliant approach
- Use information technology to present a single face of state government by aligning services provided with customer needs, irrespective of agency boundaries
- Promote direct electronic delivery of information and services to its customers via a single point of entry
- Focus on government services rather than on the method used to deliver those services
- Provide direct access to government information to meet the public's constitutional right to know and their right to participate in government
- Provide privacy, security, and integrity for the information and resources entrusted to it ■

Economic Empowerment

State government will promote and use information technology to enable its customers to prosper in the global economy.

The focus on using information technology to enable economic empowerment aligns with the Governor's Office goals as identified in the JOBS plan, the Martz/Ohs Plan for Education, and the Framework for Economic Development in Montana. These include, but are not limited to:

- Advancing e-commerce and wireless technologies
- Supporting education in the areas of high tech career preparation
- Expanding curricula with computer instruction
- Helping with private/public initiatives to electronically promote Montana-made goods and services.
- Driving communication costs down by leveraging state government's investment

Economic empowerment in the IT Vision sets the direction for state government's role in looking for opportunities to truly transform government into a structure that takes advantage of the power of technology to serve the citizen.

- ✓ Business transactions using the Internet and other electronic means are called *e-Commerce*.
- ✓ *Wireless technologies* transmit data using radio waves instead of telephone lines.

The state will use strategic public/ private relationships to gain access to the best available expertise and technologies and to extend its limited resources. State government's IT infrastructure will provide a means to enable its customers to access the market place. State government will closely monitor emerging IT trends that can improve customer service. It will enhance the quality of education and enable life-long learning for its customers by promoting "anytime, anywhere, for anyone education." ■

Strategic Relationships

State government will enter into strategic relationships and encourage collaboration at all levels of government to effectively use information technology.

The constantly changing face of information technology and the limited resources of state government require the state to establish strategic relationships with other parties. These include external vendors that provide infrastructure, technological expertise, and knowledge transfer. In some cases the state will form alliances with private sector businesses to improve government operations and services. Strategic relationships with federal and local governments will be pursued to leverage the state's limited public funds to the best advantage for our common customers.

Information technology in Montana state government will facilitate creativity and cooperation among the entities of the enterprise and their customers. State government will encourage information sharing in order to minimize unnecessary duplication and remove barriers to cooperation in the enterprise. State government's IT planning structure will include managers and executives at all levels of government and within

each organization. The state will strengthen its IT professionals through training and strategic relationships with private entities. ■

Reliability

State government will meet customers' expectations for the reliable and timely delivery of quality services and information.

Information technology systems must be reliable, regardless of how they are delivered. The state's customers expect government services and information to be available on an ongoing basis, with the appropriate infrastructure, security, and recovery plans to ensure business continuity. The goals in this plan support IT solutions that are citizen-centered, efficient, and trustworthy.

The state will ensure the stability of its IT systems and provide plans and procedures for disaster recovery and business continuity. State government will strategically invest in information technology and remain current in technology for the purpose of providing quality services, stability, and security, not simply for the sake of deploying technology. The state will maintain a highly trained workforce by recruiting, hiring, and retaining well-qualified IT staff. ■

Effective Management

IT resources will be well managed and used efficiently. State government will establish statewide direction for information technology through fiscally responsible and active stewardship.

The Montana Information Technology Act establishes state policy and guiding principles for information technology development and deployment in state government. The principles defined in the Act require:

- Managing the state's IT resources in a coordinated, efficient, and effective manner
- The adoption and enforcement of statewide policies, standards, procedures, and guidelines
- The sharing of data, information, and systems among agencies
- The alignment of planning and development of IT resources with the state budget development and approval process.

State government IT direction will be established through active and collaborative stewardship. State agencies will operate in a spirit of trust and cooperation in pursuit of customer interests. State government information technology will promote enterprise-wide policies, standards, and solutions. The state will position itself to embrace progress and change by promoting the responsible deployment of information technology. Information technology will be well managed and deployed in an appropriate, accountable, and fiscally responsible manner. ■

Goals & Strategies

Overview

The following goals of the Strategic Plan for IT provide the general direction in which the enterprise must move to realize the IT Vision. Within each goal are strategies that more specifically delineate how the goals will be reached. These statewide goals and strategies support the themes expressed throughout the Strategic Plan for IT and demonstrate how the state intends to achieve its IT Vision. The purpose of the nine goals and 36 strategies is to:

- Guide and prioritize state and agency future investments in information technology
- Coordinate resources across multiple agencies
- Lay the foundation for agency IT planning
- Help agencies succeed in achieving their own missions while promoting efficient use of the state's IT resources
- Promote compatibility between the agencies' IT plans and the state Strategic Plan for IT ■

Governmental & Private Sector Cooperation

The state will maximize the use of government IT resources through strategic relationships with business and other government entities to enhance the quality of life for Montanans.

- *Identify Opportunities for Cooperation*

  The state will examine points of common interest with local, tribal, other states, federal government, and private entities with an eye to improving communication and cooperation that will result in improved service delivery for its customers.

- *"One-Stop" Initiatives*

  The state will promote business processes in the enterprise that support "one-stop" initiatives and develop a process to facilitate and communicate IT research and evaluation.

- *Leverage the Use of IT Resources*

  The state will use the power of "anchor tenancy" to introduce technologies to areas that could not otherwise participate. The state will leverage investments through strategic relationships to ensure that there is no disparity among its customers. ■

Anchor tenants (e.g., the state) are large consumers of technology services that, through their size, provide incentive to the private sector to invest in technologies that can then be used by others (e.g., citizens, businesses, other government entities, etc.).

Well-Managed

The State will use appropriate and disciplined project management methodologies, and make strategic and fiscally responsible investments in IT resources.

- *Project Management Support*

  The state will develop project management support functions within ITSD and adopt:

  – A baseline of acceptable enterprise project management methodologies

  – Project roles and responsibilities

  – Human resource change management methods

  – Best practices in vendor selection, management, and quality assurance

  – Standardized project management tools

  – Legal assistance in managing vendor relationships

  – Project management training

  – Project management certification program.

  These functions will be applied consistently across all agency projects. Project management staff and expertise will be made available to all state organizations through staff augmentation.

- *Investment Management*

  The state will implement an IT investment management function that incorporates planning, quality assurance practices, performance measurement, and post-implementation reviews to control project lifecycle costs and ensure project success. The oversight function will include periodic reports to the Legislative Finance Committee. Project oversight functions will be applied on projects of significant size and complexity.

- *Share Project Experience*

  The state will develop a consulting relationship among government entities of the enterprise for the purpose of sharing project information, lessons learned from past and current projects, and project "best-practices."

- *Contract Management*

  The state will create a standardized, state-level, and consistent approach to developing vendor contracts and agreements. The use of standardized language and contract management processes will enable agencies to effectively manage contracts and use them to the state's benefit throughout the contract lifecycle.

- *Existing System Support*

  The state will maintain a strong emphasis on support and maintenance of existing systems through:

  – Standardized change-management and performance tracking and reporting processes

  – Quality assurance improvements that use automated testing tools and refinement of testing processes and procedures

  – Continued provision for appropriate state and federal funding support and recognition of mandates that are sometimes attached to those sources

  – Establishing portfolio management practices to manage IT asset lifecycles. ■

Efficient Use

State government will enhance the performance of agencies' mandates, missions, core competencies, and business processes through the appropriate and effective application of current and standardized IT resources.

- *Enterprise Approach*

  The state will identify the barriers to cooperation among the entities of the enterprise in the use of information technology and develop plans to remove them.

- *Use Technology to Enable Business Processes*

  The state will pursue improvements through additional investments to enhance existing technologies. New investments in information technology will support the agencies' missions and programs.

- *Evaluate Business Processes*

  The state will develop information resources, guidelines, and procedures to promote the practice of assessing and redesigning business processes within state government. Prior to any major IT investment, agencies will determine the fit between the business need and the technology solution proposed. Agencies will conduct post-implementation process reviews to ensure optimum functioning of the business processes within the constraints of the technology.

- *Videoconferencing*

  The state will promote and use videoconferencing as a way to gain more effective communication among state employees, local governments, and their federal counterparts. Videoconferencing will be used to broaden accessibility, provide an alternative means of conducting business, reduce costs, and reduce the need to travel.

- *Research and Evaluation*

  The state will establish a logical and formalized process to systematically perform research and evaluation on information technologies and processes, with an emphasis on identifying technologies and processes that have the greatest potential to work best in the state's unique environment. ■

Shared Information Resources

State government standards will promote the sharing of IT resources, including data, information, business function expertise, and technology among agencies to minimize unwarranted duplication.

- *Shared Resources*

  The state will promote the sharing of IT resources, including personnel, hardware, software, and information between the entities of the enterprise. Through the use of statewide policies, standards, and guidelines, agencies will pursue opportunities to share information technology resources.

- *Information Technology Expertise*

  The state will bring together IT expertise using existing inter-governmental groups to address the various needs for expertise in data, information, business functions, and technology resources in Montana state government. These groups will review the viability of proposed infrastructure changes in creating an integrated enterprise, taking into account the technology aspect and business functionality.

- *Standards, Tools, and Methodologies*

  The state will establish standards, tools, and methodologies to create an environment of shared data, information, and IT resources. Led by ITSD, inter-governmental groups will develop standards and training for databases, application development, Web-site development, and other technologies as appropriate and will make use of peer review and collaboration.

- *Information Technology Plan*

  The state will inventory and assess the use of IT resources among state agencies to identify where sharing can occur and implement an ongoing plan to establish shared IT resources. This plan will establish the criteria for reviewing new IT projects that are proposed by the various state government agencies.

Why Share Information?

Sharing information simply makes better government. Shared information minimizes clerical errors, information discrepancies, and government loopholes. Shared information can be upgraded, backed up, archived, and distributed simultaneously to multiple users. Shared information is more accurate. Shared information is less expensive (in time and in money) as users are able to store gathered information and retrieve and reuse the information, without spending money and time to collect and reassemble the information.

e-Government

State government will aggressively deploy appropriate electronic government services for the benefit of its customers.

e-Government is the concept of using various information technologies such as the Internet and high-speed telecommunications facilities to provide improved government services to customers.

- *e-Government Services*

  Services and information will be delivered directly to the public via electronic and traditional means, taking into account special needs. e-Government will allow services to be available around the clock.

- *e-Government Awareness*

  The state will initiate a statewide public information campaign to provide awareness of its e-Government capabilities, advertise the services provided, promote the advantages, provide access locations, and educate Montana's customers in the use of e-Government services. The state will promote the attainment of technological skills among its customers, regardless of education level or socio-economic status.

- *e-Government Business Process Analysis*

  The state will review and combine business processes to support the

customer-centric concept that is promoted by e-Government in all its delivery methods.

- *Flexible and Intuitive Delivery of Services*

  The state will guide the development of a common Web site "look and feel" for the enterprise by developing standards for Web site structure, aesthetics, and navigation. It will build flexibility and intuitiveness into the enterprise e-Government design by combining the convenience of a single point of entry with the flexibility of multiple access methods.

- *Customer Input*

  The state will solicit customer input into e-Government initiatives. This input will include an assessment of current service delivery methods and issues such as feasibility, usability, practicality, necessity, etc. ■

Enterprise Security

The state will require its IT systems maintain confidentiality and integrity while providing enterprise IT resources consistent with customer needs.

- *Security Standards*

  The state will develop, adopt, and enforce security standards in such areas as enterprise-wide authentication and agency security roles and responsibilities. Security management software will be investigated and implemented as appropriate.

- *Information Security Advisory Group*

  The state will create a voluntary multi-agency information security advisory group to stay abreast of security threat issues, test and recommend IT security measures, and assess the processes and systems used by the state.

Security means the protection of valuable assets, in this case the information itself and the IT resources that process, store, and transmit it. IT security issues include internal threats such as equipment failure and external threats from *hackers* who try to gain access to computer systems to steal

- *Agency Security Teams*

  Each agency will designate responsible parties to work with IT security managers to enhance security within the agencies and coordinate IT security with the Department of Administration and the information security advisory group. ■

Business Continuity

The state will require reliable service delivery from its IT systems and maintain up-to-date plans and procedures for enterprise wide disaster recovery and business continuity. Business continuity involves IT systems, human resources, know-ledge, physical resources, and communications.

- *Disaster Recovery and Business Continuity Planning*

  The state will establish policies, plans, and guidelines for enterprise disaster recovery, utiliz ing best practices for business continuity. The plan will prioritize government services for disaster recovery purposes.

- *Agency Plans*

  Each agency of state government will develop a disaster recovery and business continuity plan and reference these plans in its agency IT plan.

- *High Availability*

  The state will create a plan and IT infrastructure to support agency availability requirements for the various services and information provided by those agencies.

- *Business Continuity Team*

  The state will create an enterprise wide IT disaster recovery and business continuity team to coordinate planning, testing, and response to internal and external threats. The team will coordinate its work with the Governor's Homeland Security Task Force. ■

Enterprise Infrastructure

State government will use secure, coordinated, standardized, and shared IT systems to deliver integrated services to its customers.

- *Existing Infrastructure*

  The state will enhance and maintain the stability and coverage of its existing IT infrastructure. The state will stay current by adopting best practices, including planned obsolescence of technologies, and adopting new technologies in a logical and fiscally responsible manner.

- *Research and Evaluation*

  ITSD will develop a formalized process to systematically research and evaluate technology that has potential application within the enterprise.

- *Unique, Enterprise-wide Access*

  The state will provide unique, enterprise-wide access across systems, connecting customers to the enterprise and to enterprise directory services. An example would be to provide a customer with a single reusable sign-on.

- *Telecommunications*

  In order to improve customers' ability to communicate, state government will continue to promote, pursue, and leverage its telecommunications resources in the areas of voice, data, and video communications. ■

Information Technology Expertise

The state will develop a comprehensive mechanism for obtaining IT expertise both internal to state government and through external resources in order to support Montana's IT Vision in an environment of constant technological change.

- *Training and Education*

  The state will ensure that appropriate training is available throughout the enterprise for policy and program level professionals to more effectively use IT. As well, the state will ensure appropriate training is available for IT professionals responsible for managing its IT assets. It will recognize that IT staff may require additional education and training in other areas such as business planning or management.

- *Centers of IT Excellence*

  The state will use centers of IT excellence in specific technical disciplines that can provide expertise to the enterprise. It will build expertise for these centers and expand the state's IT knowledge base by tapping into specialized and highly trained IT professional contractors and through memberships in professional organizations.

- *Career Development*

  The state will enhance its IT career ladder and develop strategies to ensure professional growth of IT staff and minimize IT employee turnover. It will develop strategies around such things as standard skill sets, compensation, tuition reimbursement, internships, performance criteria, and mentoring programs. The state will develop and manage IT professionals as a strategic resource. ■

Strategic Initiatives

Overview

Strategic Initiatives make the Strategic Plan for IT become a reality.

Strategic initiatives are those IT projects and goals embraced by the state and pursued to enable state government to achieve the IT Vision. Strategic initiatives cross agency and jurisdictional lines and often provide the specific strategies to implement more than one of the statewide goals. These initiatives may focus on specific technologies or address a specific business need that encompasses a broader focus.

The strategic initiatives identified in the Strategic Plan for IT provide a foundation for setting the future technology direction for the State of Montana. This Strategic Plan for IT builds on existing, ongoing enterprise initiatives and presents new statewide strategic initiatives born as a result of the Act. These initiatives are just the beginning, as others will follow. ■

Implementing Best Practices

The Montana Information Technology Act clearly recognizes the critical importance of IT in Montana state government and sets the criteria for this initiative:

"Whereas, the Legislature finds that information technology is becoming a critical component of the methods used by state agencies in providing information and services to Montana citizens; and

Whereas, the cost for information technology is increasing both in absolute and relative terms in agency budgets; and

Whereas, information technology, in order to be deployed most effectively, must be carefully managed and coordinated throughout state agencies."

The Act sets guiding principles to be used by the state in setting its strategic direction and in deploying IT. The IT Vision mandates that IT resources be well managed and used efficiently. State government will establish statewide direction for IT through fiscally responsible and active stewardship. Several goals enunciated in this document relate to:

- Using appropriate and disciplined project management methodologies,
- Making strategic and fiscally responsible investments in information technology,
- Evaluating and enhancing the performance of agencies' mandates, missions, core competencies, and business processes through the appropriate and effective application of current and standardized IT resources, and
- Sharing IT resources, including data, information, business function expertise, and technology among agencies to minimize unwarranted duplication in services and technology.

The Implementing Best Practices strategic initiative supports these goals of the state's Strategic Plan for IT.

The state recognizes that the use of IT is central to its ability to improve the delivery of public services. It is imperative that major IT projects avoid cost overruns or delays that result in ineffective service delivery. To realize the benefits of IT, and to protect a significant taxpayer investment, the environment within which IT assets are managed must be both disciplined and flexible, focusing on the best solution with the available IT resources, and modifying business processes accordingly. IT management is premised on stewardship obligations for the investments made in performing work for the public. Stewardship also is expressed by the underlying responsibility for good agency IT management and accountability. To this end, the state will use a variety of methods to attain the goals identified, including:

1. Information Technology Investment Management

The use of the Information Technology Investment Management model provides the state with a framework for establishing an enterprise architecture, portfolio management, and IT investment planning. Establishing and documenting an enterprise architecture will provide the guidance to achieve consistency in the use of technology to support the state's business. An IT portfolio is a compilation of information about the state's investments in its IT infrastructure and agency applications. The information is organized to show how these investments support the agency's mission and programs and to demonstrate the relationships among current and planned investments. The portfolio enhances the ability of key decision-makers to ensure the investments continue to provide value and to assess the probable impacts of investments on an agency's programs and infrastructure, as well as on the overall state IT infrastructure. Using the Agency IT Plan as a base, an agency can prepare for the changing technology environment and its own business requirements to plan its IT investment strategy and prepare the path for budget requests, operational changes, and technology changes.

Best Practice is an implemented practice that has been shown to perform optimally over time.

2. Project Management

The state will pursue developing project management support functions that incorporate project management methodologies, best practices in vendor selection and management, standardized tools for project management, including training and certification of project managers, and a quality assurance program. These functions will be applied consistently across all agency projects.

3. Sharing IT Infrastructure

Since the appearance of IT in state government, agencies have deployed various technologies and systems independent of each other, without apparent consideration of the potential opportunity to share resources. Over time, this has contributed to redundant hardware and software, inefficient use of IT resources, duplicate computing capabilities among agencies, and potential security exposures. The state will evaluate and consolidate IT resources to maximize the use of computing resources, minimize software costs, and use technical personnel more efficiently. The state will focus on minimizing unwarranted duplication, share resources where possible and appropriate, and focus on

using centralization to provide secure, high-availability computing services.

4. Contractor Management

Currently, the state uses a wide variety of contracting processes and procurement tools to obtain private sector IT resources. Many times the state finds itself in a disadvantaged position when dealing with very large firms whose specific legal contracting experience is more extensive than that of state staff. The state will develop a process whereby agencies can benefit from a consistent approach to obtaining and managing contractor relationships, including standard contract language, access to negotiating expertise, and a quality assurance program. This will allow for more consistent contract administration and problem resolution processes. ■

SummitNet

SummitNet (State and Universities of Montana Multi-protocol Network) is the state's data communications network. State agencies, libraries, local government, K-12 schools, tribal colleges, and universities all have access to SummitNet. SummitNet provides data communications connectivity to over 530 office and campus locations throughout Montana.

SummitNet II will be the State of Montana's next generation telecommunications network. A high-speed digital infrastructure is being installed to completely integrate voice, video, and data services. This will allow for the transmission of voice, video, and data signals simultaneously using a single network. Additionally, the network will be able to accommodate technological advancements and changes in requirements. With one network that can accommodate growth and expansion, provide greater bandwidth to remote locations, and achieve cost efficiencies through shared resources, SummitNet II will deliver high quality service to its customers.

SummitNet II fits well with the state's IT Vision. SummitNet II will provide the framework upon which all other customer related electronic services are delivered. Telephony, Internet, and Interactive Video are just some of the examples of services to be delivered via SummitNet II. SummitNet II will allow for the advancement of e-Government initiatives, educational opportunities, and the promotion of Montana products to enable customers to flourish in the worldwide market. New technologies, such as wireless and Internet2, will be pursued as SummitNet II continues to grow to meet the state's communication needs.

SummitNet is the state's high-speed digital infrastructure to completely integrate voice, video, and data transmission services around the state.

Because SummitNet II requires significant investment in telecommunications infrastructure and services throughout the state, the state plays a major role as an anchor tenant -- meaning that access to new, high speed telecommunications services will be made available to citizens and private industry in areas of Montana that otherwise would not enjoy the benefits of those technologies. ■

Interactive Video

The use of Interactive Video is a proven cost effective way to educate, inform, and conduct meetings across this great state. It provides expanded accessibility to government. It allows participants to conduct conferencing between two or more sites by using telephone and computer networks to transmit audio and video data. Concerns over security and the expense, time, and energy consumption involved in travel increase the need for the state's customers to use alternative means of conducting business.

The Montana State Educational Telecommunications Network (METNET) provides a unique opportunity for the state to increase governmental efficiency through the use of technology. METNET consists of a number of locations with two-way interactive video facilities. It uses compressed video transported over digital telephone lines to provide a reliable platform for distance learning, state agency training, meetings, public hearings, and Telemedicine uses. METNET is available for use by state agencies, higher education, K-12 schools, and approved nonprofit entities. It eliminates or reduces travel expenses and travel time by taking advantage of video conferencing capabilities. It also allows customers to hold interactive conferences with sites not on the state network, including other video providers within the state, national and international locations.

As a statewide strategic IT initiative, Interactive Video focuses on the state's customers by providing electronic access to government and educational services. Interactive Video empowers the state's customers to participate and prosper in the global economy by providing a ready means to communicate on both a national and international level. It enables and encourages collaboration among customers throughout the far-reaching areas of the state, and it allows them to develop strategic relationships throughout the state, the country, and the world. The benefits of video conferencing may be further expanded by the use of emerging technologies such as desktop video.

Video conferencing through METNET is at a critical juncture, in terms of appropriate technology, user needs, how service is provided, and expanded use of interactive video in areas not currently using METNET. In pursuing this initiative, the state will evaluate the current environment to determine how well it meets user needs, different technologies available in large conference room settings as well as at the desktop, and how the state can best support the need for two-way compressed video. Initiatives underway within the Judiciary, the Montana Department of Transportation, and the Department of Corrections will be analyzed in concert with a review of METNET to determine where shared solutions would be most cost effective. The state will prepare a strategic plan for interactive video, ensuring impacted parties are involved and the technology options are carefully considered. ■

Montana Educational Network Cooperative

Children, families, and businesses in Montana stand to gain from access to a statewide educational network. An educational network cooperative would enhance lifelong learning opportunities and eliminate the disparity between educational "haves" and "have-nots."

The Montana Educational Network Cooperative (Cooperative) will be a coordinated effort of public schools, institutions of higher education, libraries, and state agencies. The Cooperative will concentrate on the educational telecommunications infrastructure and other technology available to students and educators throughout the state in order to provide the greatest access to and value from Montana's educational community.

The Cooperative will focus upon opportunities to collaborate in order to expand upon the current complement of existing network infrastructure that has successfully provided the benefits of improved telecommunications including: SummitNet, university network infrastructure (including Internet2), METNET, Vision Net, the Montana Library Network, and the many network programs currently deployed within the K-12 and library communities. These initiatives will be expanded in a coordinated manner to maximize the benefits that can be achieved in delivering the full range of educational services in Montana.

The goals of this initiative are to:

- Provide the greatest access to educational opportunities through the use of technology
- Enhance the quality and quantity of available education
- Improve education professional recruitment, retention and development
- Increase collaboration within and among the various levels of education professionals
- Work toward equity in the delivery of educational resources
- Share infrastructure and other resources to achieve the most effective use of available budgets

The Cooperative will identify existing education collaborations and areas where collaborations can be expanded. The Cooperative will also identify what barriers exist to collaboration, identify solutions to eliminate barriers and develop a plan for removing or mitigating the negative effects associated with each barrier. All types of barriers will be addressed, including costs of implementation and ongoing operation of the network; technology barriers, such as telecommunications standards and protocol; and, organizational and jurisdictional barriers that may exist among local school districts, libraries, the university system and the state.

A comprehensive planning project will be undertaken that will evaluate the current networking initiatives, refine the goals of the initiative, and identify the potential barriers to success. Stakeholders will be identified, have their input solicited, and comments reviewed to ensure the greatest possible range of input to the design of the Cooperative. The project will be conducted in a timely manner while allowing for stakeholder planning cycles, budgetary cycles (local and state), and the maximum opportunity for review and feedback.■

Public Safety Communications

In a day of enhanced concern over homeland security and threats to our safety, public safety communications is a critical component of the IT infrastructure deployed on behalf of the citizens of Montana. The state is challenged with a dramatically changing public safety communications environment and the rural nature of our state. Federal rules regulating wireless communications, increasing costs of radio technology, and growing public demand require Montana to migrate to fully enhanced 9-1-1 technologies, and modern, wide area, multi-agency public safety communication systems.

This strategic initiative provides the opportunity for the state to implement its vision for focusing on the citizens and customers of the state. Montana's 900,000 residents and millions of visitors annually rely on 9-1-1 dispatchers, law enforcement officers, fire fighters, emergency medical service personnel, and numerous other public service providers. In the implementation of this initiative, the state will enter into several "strategic relationships." Ongoing planning and coordination will be required for Montana to move to more modern public safety communication systems that are affordable and communicate across the full complement of public service providers.

The Governor's Homeland Security Task Force will contribute its planning efforts to ensure the highest level of public safety. In conjunction with the Task Force, all public safety partners including law enforcement, fire protection, local government, utility, and other public service providers must work in close coordination. Growing requirements for multi-agency response and the increasing costs of communications make partnerships among public service providers imperative. Advanced technology solutions that effectively support wide area, multi-agency operations and integrated communication make solutions more feasible than ever. This initiative will focus on detailed planning, interoperability, standards, and technology aggregation to ensure the needs of impacted entities are considered and met. ■

e-Government

The goal of the e-Government initiative is to make state government more accessible and responsive to the citizens, businesses, and other government entities through direct, electronic access to the full range of government information and services. Providing new and existing state government services online increases customer satisfaction and improves government efficiency. Montana state government continues to expand its e-Government offerings to customers. The objective of this initiative is to put customers in charge of their relationship with government by providing electronic access to government information and services.

Through e-Government, citizens and businesses can interact with their state government on their own schedule and at their own location.

DiscoveringMontana.com, the state's official Web site, is the cornerstone of the e-Government initiative. It is the Web site, or portal, through which many of the state's e-Government services can quickly be accessed. **DiscoveringMontana.com** is customer centric, meaning it is organized based on what customers need rather than around the organizational structure of state government.

In order to accelerate the pace by which services and information are provided electronically, the state has entered into a long-term alliance with a private company for the development of Internet-based e-Government applications. Applications developed to date provide many e-Government services, including the Business Entity Search, Professional and Occupational Licensing and Lookup, State Park Passports, Motor Vehicle Records, Income Tax Payments, Disadvantaged Business Entity Payment Tracking, and more. Other e-Government services are also developed with internal state government resources and other contracting entities. Once an e-Government service is made available, an ongoing marketing and education campaign is initiated to inform potential customers

Although the Internet and Web-based applications have taken a more visible and prominent role in the e-Government initiative, providing services electronically encompasses several methods. State government provides citizens services through the use of Interactive Voice Response (IVR), electronic data interchange (EDI), and electronic filing. Some examples include using IVR to file unemployment benefit claims, motor carriers submitting fuel tax information, and filing individual income tax returns electronically.

Montana's e-Government activities are led by the Department of Administration; with advice from the Electronic Government Advisory Council. As the state moves forward together with a single face of state government, Montana's citizens and businesses can expect to have many more e-Government services available to them, giving them more control over interaction with their state government. Montana state government is well positioned to meet the increasing demands of its citizens and customers and excited to revolutionize customer service through e-Government. ■

Montana Geographic Information Systems

Montana faces critical decisions regarding our economy, our security, the use of our land, and stewardship of our natural resources. In some cases, increased growth and development diminish the quality of life that makes our state so attractive. In other cases, changing economic factors and political decisions reduce the ability of some of our citizens and local governments to maintain a viable economic base. State and local policy makers, as well as citizens and private enterprise, are learning more and more about the power of Geographic Information Systems (GIS) to help gain access to the information needed to make educated decisions that can both expand our economic base and protect our natural resources.

Geographic Information Systems are computer programs and related IT resources that gather, process, store, and display information about the natural resources of a region. GIS data is often integrated with other information to help in the decision-making process. For example, the USDA's Farm Service Agency uses GIS information as part of its acceptance/rejection process when a farmer applies for an agricultural loan.

As a geographic component exists in 80 percent of the business of government and the private sector, the state continues to turn to GIS as a better way to manage an increasing workload and make important policy decisions. GIS technology provides Montana with the tools and information needed to analyze and solve critical issues such as economic development, quality growth, and emergency management.

The Montana Geographic Information Council (Council) was established to set the strategic direction for the use of GIS technologies throughout the state. The Council adopted the following vision, goals, and objectives for GIS and geospatial data.

Geospatial data is data having a geographic component, for example latitude and longitude, a legal description of property or an address.

Vision: Geographic information technology and geospatial data should become commonplace desktop tools, integral to every-day problem solving and managed as a part of the State Strategic Plan for IT. Because of the many shared uses of geospatial data, agencies must collaborate when using GIS technology and creating geospatial data. The state must monitor current investments to maximize benefits to the state and plan and execute new investments to remain competitive with other states in a global economy.

Goals and Objectives:

- Ensure that geospatial data is created once and used many times throughout federal, state, and local governments.

  - Provide a reliable, standardized source for framework geospatial data
  - Guide development of baseline geospatial data that conform to a standard allowing integration for multiple uses
  - Support multiple uses of geospatial data allowing for the efficient and effective development and governance in the state
  - Facilitate data sharing and use

- Promote the use of geospatial information in the development of public policy.

  - Have the "right" geospatial data readily available and widely accessible for critical decisions and for all users
  - Ensure that a geospatial infrastructure is a part of overall state IT policy
  - Provide wide and easy access to geospatial data

- Create and maintain geospatial data that is critical for Montana's needs.

  - Prioritize and implement the Montana Spatial Data Infrastructure Strategic Plan
  - Coordinate with the with Office of Management and Budget/ Federal Geographic Data Committee federal initiatives

The implementation of these goals and objectives through continued efforts at all levels of government will demonstrate the necessary cooperation and collaboration required by this Strategic Plan for IT. ■

Criminal Justice Information Systems Project

The Montana Criminal Justice Information System Project (MCJISP) is a multi-agency initiative launched to ensure that Montana keeps pace with the critical need to gather and provide timely and accurate criminal justice information.

The MCJISP Advisory Group made up of key state, county, and local justice, court and law enforcement officials was created to guide the project in its efforts to successfully improve the process of gathering criminal justice information and disseminating criminal history records.

To provide specific direction for the project, the MCJISP Advisory Group established the following two operational goals:

- **Every Montana criminal justice agency shall be able to determine the Montana correctional status within two minutes, with status currency of 24 hours.**

- **Every Montana criminal justice agency shall be able to obtain the Montana criminal history record of a person who has one within 4 minutes, with a history currency of 24 hours.**

Criminal history information in Montana originates from many different locations and in many different forms. For example, local police and sheriffs' departments initiate and maintain arrest records, while district courts have records showing whether those people who were arrested were acquitted or found guilty. The courts also maintain records on the sentences given to those convicted, while the Department of Corrections keeps records on what happens to individuals placed in the state correctional system.

Currently, various state agencies provide state, federal and local law enforcement and related agencies with this criminal history information through their own computer systems. The Department of Justice captures some information from other agencies and provides it through its Criminal Justice Information Network (CJIN), upon request, to those qualified under the law to receive it.

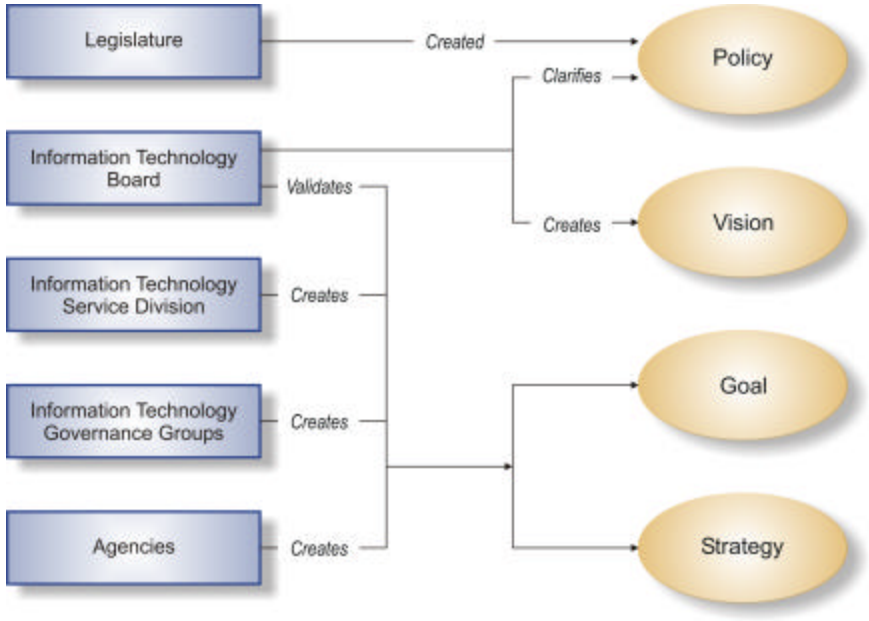
The Advisory Group seeks to promote partnerships among criminal justice information providers and users, while recognizing the independence of each. Further, the Advisory Group has required that the state's criminal justice information systems must protect the privacy rights of citizens, maintain the security of the information, allow for cost-effective information sharing, and avoid unnecessary duplication.■

Next Steps

This section of the document describes how the Strategic Plan for IT will continue to be updated and modified over the course of time. It includes discussion of the other critical documents and implementation factors required by the Montana Information Technology Act. ■

Strategic Planning Process

The following graphic depicts the parties involved in the Strategic Planning Process on an ongoing basis. Each party has a role in the development and implementation of the State of Montana Strategic Plan for Information Technology. ■



Planning Coordination

This Strategic Plan for IT does not exist in a vacuum. It must be integrated with a number of other ongoing efforts occurring every biennium. ■

Agency Plans

The Act requires agencies to prepare an agency IT plan. The agency plans must be fully integrated with and support the state Strategic Plan for IT. Following preliminary approval, the Strategic Plan for IT will be released to agencies on April 1 of each even numbered year. Each agency must submit its agency IT plan to ITSD by May 15. Approval by ITSD must be obtained by June 30 of each even numbered year. Agency IT plans must include the agency mission and goals for the use of IT within the agency. The agency IT plan must discuss how the agency will use IT to provide mission critical services and how the agency IT plan supports and

Conforms to the state Strategic Plan for IT. Agency IT plans must be in 2-year increments covering a 6-year period and provide a baseline profile of agency IT resources, deficiencies, and needs. To coordinate with the budget cycle, agency IT plans must include a list of new projects and the resources necessary to implement them. ■

Agency Reports

As part of the planning process, each agency must prepare and submit a biennial report that:

- Evaluates the performance of the agency's IT resources
- Assesses the progress towards fulfilling the agency plan
- Produces a complete inventory of agency IT resources (personnel, equipment, and software) ■

State Reports

The state must produce a biennial report based on agency plans and agency reports that will:

- Analyze the state's IT infrastructure (value, condition, and capacity)
- Evaluate the performance of the state's IT capabilities
- Assess progress made toward implementing the state Strategic Plan for IT ■

Budget Coordination

New investments in information technology can only be included in the Governor's budget if the proposed investment is contained in an approved agency plan. Furthermore, the Office of Budget and Program Planning, in cooperation with ITSD, must prepare by November 15th, a summary of *major*[1] new IT projects. This report must be coordinated with the state Strategic Plan for IT and agency plans and include:

- List by agency, institution
- Description of project
- Amount requested
- Funding source
- Estimated cost of operation ■

Governance Groups

This Strategic Plan for IT has benefited from broad based input throughout its development. Most importantly, the new Information Technology Board created by the Act has dedicated nearly all of its meeting time to the development of this plan. The Information Technology Managers Committee devoted its entire fall planning conference to developing specific goals and strategies for inclusion in the plan. In addition, the IT leadership solicited input from other groups, including the Montana Geographic Information Council, the SummitNet Executive Council, the 9-1-1 Advisory Council, the Electronic Government Advisory Council, and the Public Safety Radio Council. ■

[1] OBPP and ITSD will jointly determine the criteria for classifying a "major project."

Plan Modifications

The Strategic Plan for IT is not a static document. All things change and effective planning is a process, not an event. The planning cycle will be repeated every two years on an even year basis. The Strategic Plan for IT must be developed with regular evaluation and re-orientation. Furthermore, any substantive changes to any agency plan must be submitted to ITSD as soon as possible and not held until the next planning cycle. ■

Plan Implementation

While the Strategic Plan for IT is not a static document, it is a document that must be implemented over time. It contains IT goals, strategies, and strategic initiatives that the state must implement to demonstrate success. Several factors have been identified as critical to the successful implementation of the Strategic Plan for IT. These include:

- Commitment and support of the Legislature
- Commitment and leadership of the Governor and Information Technology Board
- Department and agency senior management commitment and leadership
- Cross departmental cooperation and coordination
- Department and agency participation through the IT governance groups in setting information technology direction
- Compliance/adherence to the statewide enterprise architecture and standards
- Managed expectations for IT initiatives
- Ongoing education/training of IT staff and departmental staff involved in the deployment and maintenance of IT assets ■

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Mary Sexton ..... County Commissioner, Teton County
Jay Stovall ..... Public Service Commission
David Hoffman ..... *Designated Alternate*
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Rep. Linda Holden ..... Montana House of Representatives
Sen. Mike Taylor ..... Montana State Senate
Sen. Bill Glaser ..... *Designated Alternate*
Lois Menzies ..... Legislative Services Division
Clayton Schenck ..... *Designated Alternate*
Justice James C. Nelson ..... Judicial Branch
Richard Lewis ..... *Designated Alternate*
Dr. Richard Crofts ..... Commissioner of Higher Education
Ron Sundsted ..... *Designated Alternate*
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Terry Meagher ..... Commerce
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Amy Sassano ..... Governor's Office
Edwina Dale ..... Commissioner of Higher Education
Doreen Boyer ..... Montana Historical Society
Dana Corson ..... Supreme Court
Steve Tesinsky ..... Justice
Dave Nagel ..... Labor and Industry
Tori Hunthausen ..... Legislative Audit Division
Mike Allen ..... Legislative Fiscal Division
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Bob Morris ..... Public Instruction, Office of
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Mary Bryson, Chief , Policy and Planning Bureau
Barry Bass, Business Analyst
G Scott Lockwood, Business Analyst
Tom Murphy, Business Analyst
Kay Richford, Business Analyst

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Appendix A

Statutory References

The following excerpts from the Montana Information Technology Act provide the background and expectations for the State of Montana Strategic Plan for Information Technology. ■

Guiding Policy

The Act establishes guiding policies for state government to follow when using information technology in its operations:

- Information technology is used to improve quality of life for citizens
- The development of information technology resources must be organized, deliberate and cost-effective
- The Department of Administration must be accountable to the governor, legislature and the citizens

The Act provides guiding principles for use by state government to ensure the second policy is achievable.

Section 2-17-505, MCA ■

Information Technology Board

The Act amends current law to create an Information Technology Board, with expanded membership that replaces the Information Technology Advisory Council. The Board is to advise the Department of Administration on key information technology issues, provide a forum to guide the development and deployment of information technology in the state, and to share information. In addition, the Board shall study state government's present and future information technology needs and the use of emerging technologies.

Section 2-17-513, MCA ■

IT Planning

The Act requires the department to develop and implement a statewide strategic information technology plan. In addition, the Act requires each agency to develop individual IT plans that document agency IT plans for the next six years. These plans are submitted to the Department of Administration for approval and alignment with the state Strategic Plan for IT. The IT plans must also align with the biennial budget process. Agency requests for funding of major IT projects must be included in their IT plans.

Sections 2-17-521 through 2-17-526, MCA ■

Monitoring & Enforcement

The Act defines the Department of Administration duties and responsibilities associated with the new IT planning and budgeting requirements. The department shall:

- Assess progress toward implementing the state's strategic IT plan
- Establish and enforce statewide IT policies and standards
- Evaluate IT budget requests with OBPP
- Report on IT based on the agency plans
- Evaluate performance relating to information technology.

The Office of Budget & Program Planning (OBPP), in cooperation with the department, shall prepare a statewide summary of major new IT projects contained in the state budget. The Legislative Finance Committee (LFC) provides interim oversight for information technology. The Department of Administration shall report to the LFC on a regular basis and to the legislature on the IT activities of the department.

Sections 2-17-512, 2-17-514 and 2-17-526, MCA ■

Applicability

The Act includes provisions indicating what entities must comply with the provisions of the Act. Generally, the Act applies to every agency of the Executive Branch of government. The Act does require the Legislative and Judicial Branches to prepare an information technology plan and provide their IT plan to the Department of Administration. Certain entities are granted exemptions from certain provisions of the Act. The National Guard is exempt from most provisions of the Act. Additionally, the Montana University System and the Office of Public Instruction are granted exemption from the procurement review and approval process in the Act unless the proposed activities would detrimentally affect the operation of the central computer center or the statewide telecommunications network. In addition, the department may grant exceptions to any policy, standard, or other requirement adopted by the department.

Sections 2-17-515 through 2-17-517, MCA ■

Appendix B

Glossary

A common problem in the IT industry is the proliferation of terminology and lack of consistency and standardization. The definition of a particular term is often dependent upon the context and the technical environment where it is used. This glossary has been included to ensure that all readers understand the terms used in this document.

Anchor tenant	A large consumer (e.g., the state) of technology services that, through its size and commitment to procure services, provides incentive to the private sector to invest in technologies that can then be used by others (e.g., citizens, businesses, other government entities, etc.).
Best practices	An implemented practice that has been shown to perform most optimally through time. As processes and procedures are defined and implemented, patterns can be seen that show the best process and procedure for a business unit, functional area, or type of functionality.
Business Continuity	The sustaining of normal business operations during both expected and unexpected events that would otherwise impair the normal functioning of the state. This involves around-the-clock ability to recover from both manmade and natural disasters and includes assets beyond information technology such as facilities, personnel, critical knowledge, and physical information.
Business Function	A logically related series of activities which, taken together, represent the primary responsibility of a single business unit.
Business Process	The manual or automated process steps that are performed in order to accomplish a government service. Example: In producing payroll checks an organization must collect employee timesheets, verify timesheets, run pre-payroll reports, run payroll check runs, and sign payroll checks.
Change Management	Management processes set up to ensure that all software or hardware changes made to IT systems have been done in accordance with predefined guidelines. These guidelines are put in place to reduce the risk of introducing unexpected errors or system downtime.
Customer	Citizens, businesses, federal, local, and tribal governments, and other organizations and stakeholders that utilize Montana state services.
e-Commerce	Business transactions that are conducted via the Internet or other electronic media.
e-Government	The provision of government services via computer or Internet-based technology.

Enterprise	All agencies of the state, including the University system and participating local government and educational entities, working collaboratively to use, share, and leverage the investments made in information technology. To this end, agencies of the state and participating entities share systems and networks, use standard software and hardware, and train employees in common techniques.
Enterprise Infrastructure	All information technology hardware and software that cumulatively provides a common foundation of equipment and applications that is shared among all entities of the enterprise. Examples: network hardware/software, LAN/WAN, mainframe and mid-tier computer equipment, storage devices, security hardware/software, etc.
Enterprise Security	Integrated, enterprise-wide protection of IT assets, data, and resources. This includes accessibility, privacy, data integrity, and accuracy of information. It also includes the availability of resources entrusted to government by its customers.
Geographic Information Systems	Computer programs and related IT resources that gather, process, store, and display information about the natural resources of a region. GIS data is often integrated with other information to help in the decision-making process.
Geospatial data	Data having a geographic component - for example, latitude and longitude. A legal description of property or an address.
Global Economy	This includes the economies of Montana, other states, and the world that provide economic expansion and growth opportunities.
Goals	The nine goals created to provide direction toward the key elements of the Strategic Plan for IT's Vision.
Human Resource Change Management Methods	Management methods used to provide smooth transitions during times of adding, removing, or changing personnel or changing the manner in which business is conducted, such as through an e-Government initiative. These might include resource planning and forecasting, knowledge transfer processes, training, outplacement services, etc.
Information	Artifacts such as data, images, knowledge, documents, etc. that are found in both physical and electronic form.
Information Technology	Technology, typically in the form of computers, software, networks, telecommunications, electronic storage, etc., that enables the storage, communication, manipulation, and access to information.
Internet	A worldwide collection of interconnected computer networks that communicate via telephone lines, high-speed data lines, and wireless technology. The Internet provides the ability for companies, organizations, individuals, and schools to share information.
IT Asset Lifecycle	The ongoing process of maintaining modern hardware and software technologies in order to enable business processes today and in the future.

Performance Measurement Metrics	Performance information gathered from a cross-section of past systems that is used as a benchmark to help measure, grade, and improve the performance of future systems.
Portfolio Management Practices	An inventory of IT systems that includes a total cost of system ownership and an evaluation of where each system stands in its lifecycle. The agency portfolio of systems provides information for prioritizing future IT projects.
Post-Implementation Reviews	Structured sessions involving members of an IT system development team and used to assess positive and negative outcomes from a development effort. These are used to discuss lessons learned and help encourage improvements in development processes on future projects.
Privacy	The right of individuals to keep information pertaining to themselves from being given out to other individuals and businesses.
Project lifecycle	The time-span that includes all phases of a project, from its inception to the final signoff on the completed, production-ready system. For the development of IT systems this typically includes requirements analysis, design, development, testing, and implementation.
Project Management Certification Program	An educational program that teaches and tests the disciplines, processes, and tools of the Project Management profession and requires activities that encourage the maintenance and improvement of acquired project management skills.
Quality Assurance Practices	Activities and processes that are implemented in order to ensure IT system conformance to expected requirements, standards, and characteristics.
Security	Measures taken to guard against unauthorized access or use of information and equipment.
Service(s)	A function that provides access to public information, enables business activity, and addresses the needs of state customers.
Shared Information	Common electronic information of separate state government organizations that is stored and maintained using common IT assets in order to provide optimum customer service. This sharing includes the actual information artifacts such as data, images, documents, etc., and can also encompass the methods or mechanisms needed to create, store, and retrieve the information.
State	All government officials, agencies, and organizations that together work to serve state government interests.
Strategic Relationships	Relationships entered into by two or more parties enabling the attainment of mutual goals that would be difficult or impossible to reach if attempted individually.
Strategies	Measurable activities to be performed for the purpose of attaining the goals defined in the Strategic Plan for IT.

SummitNet	The State of Montana's high-speed digital data communications network. The next generation of SummitNet will completely integrate voice, video, and data transmission services around the state.
Telephony	Technology, information, and processes that pertain to the telephone industry and its capabilities.
Training	Educational programs designed to ensure that the human IT resources, as well as the receivers of the IT services, are educated in a timely manner. This education comes from many different methods and providers.
Vendor Management	The activities involved in managing hardware and software vendors in regard to contracts, licensing, personnel, facilities, equipment, etc. The goal is to ensure that the vendor works well with the state organization and provides products and services that bring benefit to the state.
Video Conferencing	The combined use of video and audio communication technologies to provide the ability to conduct face-to-face meetings with participants in various and possibly remote locations.
Vision	Ideas, concepts, and themes that provide a common ground for the development and implementation of the Strategic Plan for IT.
Wireless	The connection of electronic devices through the use of radio waves, without the use of wires. This typically refers to communications using telephones or computer devices. ■